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Editor : Ganesh Lalwani

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The Lord Nemi in Image

LEONA SMITH KREMSER

In image, He sits
in lotus pose, crumbled at the edges
into the time-worn gray
of the pitted stone that long ago
sweetly, gave up its form to Him.

As cosmic light,
the arc behind His head glows
of the omniscience of this naked Lord,
stone gaze at eye-level
and at peace with Himself.

Mid thorns that turned aside
in His term as Lord on earth, circa 1500 B.C.
He twice travelled from Gujarat to the Deccan
teaching the Jaina right conduct:
non-injury by thought, word and deed.

As well, He laid His special blessings
on the most forlorn of the womb-born,
the slave food-animals
and thereby He projected their souls
into the spiritual dimension of freedom.

...Even today
in this age of holocaust and greed,
His blessings reach down to all living beings
who follow this distant Lord into non-injury
that is the Jaina passage
out of body bondage,
into soul freedom.

O, praise to the holy presence
within the image of the Lord Nemi
at Kambadahalli in the Deccan.

•

Thavaraccaputra

GANESH LALWANI

One day Thavaraccaputra was standing on the terrace. From there he was looking at the sky.

The dusk was just approaching. Evening light was turning from purple to gray. Birds were retreating to their nests. Moon was shining on the top branches of an Amalaki tree. The slender leaves of Nima were rustling in the breeze.

Thavaraccaputra was lost in some reverie. When a song sung with a sweet voice entered into his ears he came to his senses. It appeared to him that some people were singing together. Not far distant but very near. The song was floating and vibrating in the light air and had as he felt engulfed him. He was almost convinced that he had not heard such a melody before in his life. As the distant horizon was lost in the silken light of the moon so everything had lost its identity in that song. It was so absorbing, so sweet !

After his first enchantment subsided he ran downstairs to his mother. Questions like these were arising in his innocent mind : What is this song? Who were singing? Why were they singing? He had to get answers of them all. And except his mother who could give answers to all his questions? Because in age he was only a child.

On hearing so many questions at a time his mother began to laugh on his curiosity. She said, 'If I were not there what would you have done?' Then after a while she said, 'A child was to be born in Susama's house nearby, he is now born. It is why they are singing, they are expressing their joy.'

His face became radiant on hearing this. He said, 'Now I understand. When a son is born they sing. Their song echoes their joy.'

Caressing the child's hair she said, 'Yes they do. Why don't they?'

Thavaraccaputra's face beamed again. He said, 'Were such songs sung when I was born?'

'Of course ! Songs were sung.' She said laughing. Then she added, 'Sweeter, richer and more melodious.'

Thavaraccaputra instantly ran to the terrace. Standing by the side of the railing he again paid attention to that song.

Thavaraccaputra was thinking something at that time. Probably he was thinking, when a child was born how the people were moved with happiness.

But no, it was not that song hearing which he went down. Where was that sweetness in it? Where was that dreamlike lilt? It was coming out as if from a bleeding heart. It brought tears to his eyes.

Thavaraccaputra's gaze now glued to the firmament. A moon beam of the fairy world, he felt, was mildly glowing all over the sky. Still it appeared to him that peace was no more there, a painful realisation coming out from the depth of his heart had given the air an expression of lament and tears.

Question arose in his heart again : What had happened in the meanwhile that everything had changed in a moment? Those people must be now singing a very different song. He again ran down to his mother.

He saw his mother was sitting on the earth. Big drops of tears were rolling down her cheeks. Thavaraccaputra cried, 'Mother !'

As she looked at him by raising her eyes she tried quickly to wipe out her tears but could not do so fully. Drops of tears at the corner of her eyes still mournfully sparkled in the light of the lamp. Thavaraccaputra stood silent looking at that. Instantly his mother understood what was in his mind. So affectionately she drew him near and clasped him in her bosom. She said, 'Why that song is not there—this you want to know?' Then she said slowly, 'That child has just gone away, leaving us all behind.'

Have gone away? Why? Where? Why they have allowed him to go? When he will return? Questions like these he put to his mother.

Hearing these questions his mother began to laugh even in tears. 'You mad.' she said with deep comprehension and affection.

But this much did not satisfy him. So everything had to be explained to him. She had to say, 'Death had taken him away, never he will return.'

On hearing this he became melancholy. Then thinking for a while he asked, 'Mother, does everybody die?'

She became apprehensive looking at his eyes moist with tears. She gave no reply, only gathered him within her arms still closer. She said, 'Let us talk something else.'

'No mother, tell me everything.' He looked at her intently. 'Mother, shall I also die?'

But how could she tell her son that he would also die. But there was no way out. So she had to say, 'Yes, one day everybody will die. I myself shall not live for all times.'

When Thavaraccaputra heard that one day everybody would die, nobody would live for all times, death would carry away everybody, then he became convinced that this earth wherein all are involved was unreal. Everything was meaningless. Along with this a querry arose in his mind : Wasn't there anything in the world by getting which one could say that he had become immortal? Could say, he had no fear of death any more, he had won over death.

From that day Thavaraccaputra began to live aloof from the world. Then the day he received initiation on the path of liberation from the hand of Tirthankara Aristanemi he left the world that appeared transient and full of suffering.

Karma and the Arhant in Jainism

ARVIND SHARMA

I

The concept of *jīvanmukti* is held in common in Indian philosophy by the Sankhya-Yoga, the Advaita Vedanta, and the Jaina and Buddhist schools of thought.[1] The purpose of this paper is to determine the status of *karma* in relation to the liberated *jīva* after he has become liberated but before he dies, according to Jainism.

II

It seems best to begin by considering the situation in Advaita Vedanta. Although there are some internal differences of opinion within the tradition,[2] the general position can be said to be represented by the following statement about *jīvanmukti* in Advaita Vedanta :

> *Mokṣa* may be realized during one's life and when so realized one is a *jīvanmukta*. All the accumulated action which has not yet borne fruit (*saṁcita-karman*) and all action which would otherwise take place in the future (*āgāmī-karman*) is obliterated; action done in the past which has already begun to bear fruit (*prārabdha-karman*) must, however, be carried out. The *jīvanmukta* carries this out though without its affecting him, for he is unattached to it.
>
> For the *jīvanmukta*, the enlightened man, complete liberation is obtained upon the death of the body (*videhamukti*): he is not reborn.[3]

[1] M. Hiriyanna, *Outlines of Indian Philosophy* (London : George Allen & Unwin Ltd., 1932), pp. 152, 169, 297, 381. Also see Surendranath Dasgupta, *A History of Indian Philosophy*, Vol. II (Cambridge University Press, 1952), p. 246 ff.

[2] Haridas Bhattacharyya, ed., *The Cultural Heritage of India* Vol. III (Calcutta : The Ramakrishna Mission Institute of Culture, 1953), p. 277.

[3] Eliot Deutsch and J. A. B. van Buitenen, *A Source Book of Advaita Vedanta* (Honolulu : University Press of Hawaii, 1971), p. 312.

The crucial point from the point of view of this paper is that *after* attaining liberation in this life the liberated individual gathers *no new karma*, though outwardly he may seem to be acting.[4]

III

What is the corresponding situation in Jainism? M. Hiriyanna describes the situation in Jainism thus :

> The aim of life is to get oneself disentangled from *karma*. Like the generality of Indian systems, Jainism also believes in the soul's transmigration, but its conception of *karma*, the governing principle of transmigration, is unlike that of any other. It is conceived here as being material and permeating the *jīvas* through and through and weighing them down to the mundane level. 'As heat can unite with iron and water with milk, so *karma* unites with the soul; and the soul so united with *karma* is called a soul in bondage.' As in so much of Hindu thought, here also the ideal lies beyond good and evil, so that virtue as well as vice is believed to lead to bondage, though the way in which each binds is different. If through proper self-discipline all *karma* is worked out and there arises 'the full blaze of omniscience' in the *jīva*, it becomes free. When at last it escapes at death from the bondage of the body, it rises until it reaches the top of the universe described above as *lokākāśa;* and there it rests in peaceful bliss for ever. It may not care for worldly affairs thereafter, but it is certainly not without its own influence, for it will serve ever afterwards as an example of achieved ideal to those that are still struggling towards it. During the period intervening between enlightenment and actual attainment of godhead—for all liberated souls are gods—the enlightened *jīva dwells apart from fresh karmic influence*. An enlightened person may lead an active life, but his activity does not taint him as even unselfish activity, according to Jainism, does in the case of others. During this interval the devotee, as in Buddhism, is termed an *arhant*, and he becomes a *siddha* or 'the perfected' at actual liberation. It will be seen from this that the stage of *arhant*-ship corresponds to the Hindu ideal of *jīvanmukti* and the Buddhistic one of *nirvāṇa*.[5]

[4] For more detailed descriptions of the *jivanmukta* in Advaita Vedanta see S. Radhakrishnan, *The Brahmasutra* (London : George Allen & Unwin Ltd., 1960), pp. 215-218 ; Sankara's commentary on *Brahmasutra* 1.4.15 and 19 ; Surendranath Dasgupta, *op. cit.*, p. 246 ff. ; V. H. Date, *Vedanta Explained : Sankara's Commentary on the Brahmasutra* (Bombay : Booksellers Publishing Co., 1959), pp. 525-6 ; etc.

[5] M. Hiriyana, *op. cit.*, pp. 168-169. Emphasis added.

The crucial expression about the liberated *jīva* is that he "dwells apart from fresh karmic matter". Here one should note that "the performance of action, the form it takes when it enters the *ātman*, and the form with which it becomes a part of the bound *ātman* are all called by the same name *karma*. So when the Jainas say that the *ātman* should get rid of *karma* (action), we should take the third meaning".[6]

In Jainism, *karma* is a form of subtle matter. In this respect the question of the non-contact with fresh karmic matter needs to be closely examined and the use of the expression by Hiriyanna leaves room for some clarification.

There are basically two ways in which a cut-off of the *karmic* influx could be visualized : (1) that no fresh *karma* flows into the *jīva at all* or (2) its inflow is matched by its immediate outflow so that no new *karma* accumulates.

Some descriptions of the process of salvation in Jainism seem to suggest that further non-involvement with *karma* of the enlightened *jīva* results from a complete cut-off of the inflow. Thus in the discussion of the two realities (*tattvas*) *saṁvara* and *nirjarā* it is pointed out that "By a systematic control of the mental and physical activities, any fresh inflow of *karmas* may be prevented, while certain austerities would destroy the existing *karmas*".[7] This seems to suggest that *first* all inflow of *karma* is stopped, *then* all the accumulated *karma* is exhausted (as contrasted with the simultaneous occurrence of both in Advaita Vedanta). The key point would be the stoppage of all further inflow.

On a closer examination of the evidence, however, it appears that this description of the situation is not quite exact. In Jainism, the progress of the *jīva* to liberation is visualized as passing through various stages called *guṇasthānas*.[8] A consideration of the last few *guṇasthānas* is likely to shed some light on the issue :

> If a man be on the twelfth step, *kṣīṇamoha guṇasthānaka*, he has won freedom for ever not only from greed but from all the *ghātin karma*, and though the *aghātin karma* still persist, they have little power to bind the soul : in fact, so limited is their power, that at

[6] P. T. Raju, *The Philosophical Traditions of India* (University of Pittsburgh Press, 1971), p. 109.

[7] Haridas Bhattacharyya, *op. cit.*, p. 408.

[8] *Ibid.*, p. 413.

death a soul passes at once through the two remaining stages and enters *mokṣa* without delay. The Digambaras believe that at this stage the first two parts of pure contemplation (*śukladhyāna*) are developed.

If a man who reaches the stage of *sayogīkevalī guṇasthānaka*, preaches and forms a community or *tīrtha*, he becomes a Tirthankara. He first (according to the Digambaras) obtains 'eternal wisdom, illimitable insight, everlasting happiness and unbounded powers'. When this absolute knowledge is acquired, Indra, Kubera and other heavenly beings, including the celestial engineer, Vaisramana, raise the *samavasaraṇa* (or heavenly pavilion) where the twelve conferences meet to hear eternal wisdom from the Kevali. After prayers have been offered, the Kevali goes about preaching truth, until, when the day of deliverance approaches, he takes to the third part of pure contemplation (*śukladhyāna*). Here the soul reaches every part of the universe and is yet contained within the body, though its only connexion with it now is residence. The last part of contemplation follows when the fourteenth step is ascended, and the body disappears like burnt camphor. This is *nirvāṇa*.

As we have seen, it is the Tirthankara, the man at this thirteenth stage, that the people worship; for once he passes to the next step, he loses all interest in people, besides parting with his own body. The Siddhas alone know exactly where every one is on the heavenward road but they have lost all interest in the question.

The moment a man reaches the fourteenth stage, *ayogīkevalī guṇasthānaka*, all his *karma* is purged away, and he proceeds at once to *mokṣa* as a Siddha (for no one can remain alive on this step). In *mokṣa* there is of course no absorption into the infinite, but the the freed soul dwells for ever above the land called Siddhasila, from whence it returns no more, and this is *mokṣa*.[9]

It is clear from this description that the *total* purging of *karma* only occurs at death. Then how can a Kevali be called a liberated one while alive?

Two considerations seem to bear directly on the issue. The first is the distinction between *ghātin* and *aghātin* karma. *Ghātin karma* are

[9] Mrs. Sinclair Stevenson, *The Heart of Jainism* (New Delhi : Munshiram Manoharlal, 1970 [first published 1915]), pp. 190-191.

"those difficult to destroy, or according to another interpretation those which destroy omniscience : *jñānāvaranīya, darśanāvaranīya, mohanīya* and *antarāya*".[10] *Aghātin karma* are "those easy to destroy, or those which do not destroy omniscience : *vedanīya, āyu, nāma* and *gotra*".[11] As the *jīva* progresses to salvation he is left only with *aghātin karma* which "have little power to bind the soul".[12]

The second consideration involves the Jaina practice of "*sallekhana* or voluntary self-starvation" to which Lord Mahavira is himself believed to have resorted.[13] Since self-mortification is believed to exhaust *karma* this practice would make soteriological sense as ensuring that no *karma* at all was left clinging to the soul in the end.

The basic point suggested by these considerations seems to be that it is not so much that after enlightenment the living *jīva* is totally free of *karma* but rather that his *karma* evaporates virtually as soon as it arises so that in effect he is free from it.

IV

The conclusion is perhaps best presented in terms of a metaphor drawn from quantum physics wherein light is sometimes treated as a particle and sometimes as a wave. So long as the *jīva* is in bondage, *karma* consists of subtle particles of matter that stick to his soul but once he is liberated his *karma* is more like a wave—arising and exhausting itself continually till the liberated *jīva* finally passes away.

[10] *Ibid.*, p. 190, fn. 2.

[11] *Ibid.*, fn. 2. It is remarkable how closely *aghatin karmas* correspond to the category of *prarabdha karmas* in Advaita Vedanta.

[12] *Ibid.*, p. 190.

[13] R. C. Zaehner, ed., *A Concise Encyclopedia of Living Faiths* (Boston : Beacon Press, 1969), p. 261.

Was Sasanka a Jaina in his Early Life ?

CHITTARANJAN PAL

Some historians do not regard *Ārya-mañjuśrī-mūla-kalpa* as a genuine historical work. But it is undeniable that the book contains Buddhist traditions prevailing at the time of the composition of the book.

It is from this book that we come to know that Sasanka, king of Gauda, persecuted the Nirgranthas or the Jainas along with the followers of Gautama Buddha. It seems that the persecutionary measure adopted against the Jainas was not less severe than that taken against the Buddhists. *Ārya-mañjuśrī-mūla-kalpa*, being a Buddhist work dwelt only upon the persecutions suffered by the Buddhists. But the story of the sufferings of the Nirgranthas or the Jainas was dismissed in a single sentence.

Regarding the nature of the book, it is to be remembered that all sorts of traditions and stories, even if contradictory, have been accommodated in this book of stupendous size. Examples are not wanting to prove this point of view.

The author of the book has painted the kings of the Pusyabhuti dynasty in the brightest colour. As regards the death of Rajyavardhana, elder brother of Harsavardhana, the author of *Ārya-mañjuśrī-mūla-kalpa* states that the prince died at the hands of "a king belonging to the *nagna-jāti* or 'naked caste'.

bhaviṣyate ca tadākāle madhyadeśe nṛpovarah/
rakārādyotayuktātmā vaiśyavṛttimacañcalah//
śāsanesmim tathā śakta somākhya samo nṛpah/
so'pi yāti tavāntena nagnajāti nṛpena tu//

The passage as translated by K. P. Jayswal runs as follows :

At that time will arise in Madhyadesa, the excellent king R (Rajyavardhana), brilliant, self possessed, of the vaisya-caste and steady. He (will be) of this religion and (will be) as powerful as Soma (Sasanka). *He also ends at the hands of a king of the nagna-caste.*

The word *nagnajāti nṛpena* may be translated as 'The king of the naked-caste'.

It is true that the author of *Ārya-mañjuśrī-mūla-kalpa* has not disclosed the identity of the assassin of Rajyavardhana, but the passage quoted above throws a disguised insinuation at Soma or Sasanka whose name has been mentioned in the previous line, as the perpetrator of this heinous crime.

The Chinese pilgrim Hiuen-Tsang in his account categorically mentioned that Sasanka, king of Gauda had assassinated the prince of the Pusyabhuti dynasty. Hiuen-Tsang stated in his book, "Prabhakaravardhana was succeeded by his son, Rajyavardhana on the throne of Kanauj. The latter soon after his accession was treacherously murdered by Sasanka, the wicked king of Karnasuvarna in East India, a persecutor of Buddhism." Modern scholars are unanimous in fixing the responsibility of murder of Rajyavardhana upon Sasanka.

The assassin of Rajyavardhana has been stated as belonging to the naked community by the author of *Ārya-mañjuśrī-mūla-kalpa* and as such we shall not commit a great blunder if we suppose that king Sasanka belonged to the *nagnajāti* or naked-caste or community.

A minute perusal of the passage refering to the death of Rajyavardhana in the *Ārya-mañjuśrī-mūla-kalpa* leaves an impression on the mind that the author of the said book hinted at Sasanka by the word *nagnajāti nṛpa*. The author of *Ārya-mañjuśrī-mūla-kalpa*, in most cases, did not mention full proper names of the royal personages or Buddhist or Brahmanical monks or scholars whom he referred to in his book. It is the peculiarity of the author that he had used the initial letter, or a synonym or the caste or race name for the person whom he referred to in his work.

It is true that in Bengal there is no caste having the appellation of *nagnajāti*. But there is ground to believe that the author had in his mind the thought of the sect of the Digambaras, when he mentioned *nagnajāti*. The advanced monks of the Digambara community go on naked or sky-clad as they believe that the discarding the use of clothes will help them in attaining salvation. The lay-devotees of the sect revere the Tirthankaras who are also sky-clad.

But there is one great difficulty in the way of such a supposition as in one place of the book i.e. *Ārya-mañjuśrī-mūla-kalpa*, Sasanka has been described as belonging to the Brahmin caste and bestowing largess to Brahmins. A few coins, which have been unearthed, tells that Sasanka was a devout Saiva by religious persuasion. A statement of Hiuen-Tsang

leads us to the same conclusion too. In one place of his itinerary Hiuen-Tsang states that Sasanka made an abortive attempt to replace a Buddha-image by an image of Siva. Therefore, it is evident that Sasanka belonged to the Brahmin caste and was a devotee of Siva.

But the above mentioned proof does not militate against the view that he was a follower of the Digambara Jaina sect in his early life or he was born of Jaina parents of Brahmin caste. There is also a disguised hint in *Ārya-mañjuśrī-mūla-kalpa* of his being a follower of a non-Brahmanical sect in his earlier life. In that stanza, he has been depicted as performing some non-Brahmanical religious activities. On the basis of that evidence K. P. Jayswal stated that "Soma had done in his former life some Buddhist pious acts." The stanza referring to the insinuation is quoted as follows :

pūrvaṃ pratyeka buddhāya bhaktācchādanadattavām(?n)//
pādakau ca tadā dattau cchatracāmarabhūṣitam/
tasya dharmaprabhāvetau mahārājyatṛdevatau//

The stanza quoted above proves it indirectly that Sasanka was not a follower of Brahmanical Saiva sect in his former life, or birth but a devotee of Pratyeka Buddhas and he gave garments, shoes, umbrellas and *cāmaras* or fly-whisks to Pratyeka Buddhas and on account of these meritorious activities he obtained his kingdom and enjoyed it. It is to be kept in mind that Pratyeka Buddhas are not worshipped by the Buddhists only. The Jainas too venerate the Pratyeka Buddhas that means Pratyeka Buddhas are worshipped by the Buddhists and Jainas alike. The activities which have been stated to be 'Buddhist pious acts' by K. P. Jayswal may also be regarded as the 'Jaina pious acts'. So it will not be improper to suggest that Sasanka was a follower of the Digambara Jaina Sect or his parents were Jaina, though belonged to the Brahmin caste.

But Sasanka was a bitter enemy of the Jainas. The author of *Ārya-mañjuśrī-mūla-kalpa* states that Sasanka had destroyed the rest-houses of the Jainas throughout the world i.e. his kingdom. The fact that Sasanka was a follower of the sect founded by Mahavira, (i.e. Jainism) and that he persecuted the Jainas should not stand in the way of the proposed hypothesis or suggestions. The famous Pallava king Mahendra Varman was originally a Jaina, but when he was converted to Saivism by the saint called Appar, he did not hesitate to slay thousands

of Jainas who refused to follow him in matter of religion. It is also a well-known fact that in India Hindus converted to Islam persecuted their former co-religionists more severely than the born-Muslims. So Sasanka, a former Jaina who persecuted his former co-religionists should not stand against the suggestion that in his early life he was a devotee belonging to the Digambara Jaina Community.

How Karma Theory Relates to Modern Science

DULI CHANDRA JAIN

INTRODUCTION

The *karma* theory of the Jaina religion is a unique, rational, scientific and complex theory. In its true conceptual form, it is unique to Jainism. It supports the features of the Jaina religion which distinguish it from other religions of the world, viz., the concept of independence of each individual soul and the teaching that selfhelp is the means to achieve such independence. The theory of *karma* is scientific in the sense that it conforms to the basic premises of science. However, it has not been established by modern scientific experiments. The *karma* theory is complex and thus it is one of the least understood concepts of Jainism. In its simplest form, it is stated : As you sow, so you reap. It is interpreted that *karma* rewards or punishes us for our past deeds. It is construed to imply that all wealthy and powerful people of the world did good deeds in the past and that is why they are what they are. It has been distorted to indicate that *karma* is powerful, even more powerful than the soul, our future is predestined and whatever has to happen to our soul will happen. On the one hand, people have the impression that one can avoid the consequences of undesirable *karma* by religious rituals such as prayers, special worships, charitable contributions etc. On the other hand, sometimes it is said that we should undergo sufferings which might be the consequences of past *karma* so that we will not have to suffer in the future. A careful study of the *karma* theory as described in the Jaina scriptures, performed with a scientific viewpoint, leads to the conclusion that the above interpretations are only partially true.

STATEMENT OF KARMA THEORY

Material (dravya) and Abstract (bhāva) Karma

There are two types of souls in this universe, the liberated souls (*mukta jīva*) which are the pure souls (*siddhas*) having infinite perception, knowledge and bliss (*ananta darśana, jñāna* and *sukha*), and the worldly (impure) souls (*saṃsārī jīva*) which are involved in the mundane cycle

of birth and death. The worldly souls have ultrafine particles of matter known as *karma* particles associated with them. The liberated souls have freed themselves from the bondage of *karma* particles. There are two basic types of *karma*, the material (*dravya*) *karma* mentioned above which are particles of matter, and abstract (*bhāva*) *karma* which are the feelings of pleasure and pain, love and hatred, compassion and anger, etc. The relationship between material *karma* and abstract *karma* is that of cause and effect. The material *karma* give rise to the feelings and emotions (abstract *karma*) in the worldly souls which in turn cause the influx (*āsrava*) and bonding (*bandha*) of fresh material *karma*. Thus the relationship between the material and abstract *karma* can be described as one between plant and seed. It should be remarked that soul is an entity different from matter. Thus the transformations in a soul (abstract *karma*) occur because of the intrinsic attributes of soul while the transformations (influx, bonding, etc.) in material *karma* take place because of the intrinsic attributes of matter. Acarya Kundakunda has written, in *Pañcāstikāyasāra* :(1)

bhāvo kammaṇimitto kammam puṇa bhāvakāraṇam havadi
ṇa du tesim khalu kattā ṇa viṇā bhūdā du kattāram 60

The emotional states of a living being are caused by the *karma* particles and the *karma* particles in their turn are caused by the emotional states. However, the soul is not the essential cause and still without essential cause these changes can not occur.

kuvvam sagam sahāvam attā kattā sagassa bhāvassa
ṇa hi poggalakammāṇam idi jiṇavayaṇam muṇeyavvam 61

Soul which brings about changes in itself is the intrinsic cause of the mental states but the soul is not the intrinsic cause of the changes in the *karma* particles which are material in nature. This is the teaching of Jina.

kammam pi sagam kuvvadi seṇa sahāveṇa sammamappāṇam
jivo vi ya tārisao kammasahāveṇa bhāveṇa 62

The changes in *karma* particles occur due to the intrinsic nature of material particles. Similarly, the changes in any soul occur due to the intrinsic characteristics of the soul and through its own impure states of thought which are conditioned by *karma*.

Eight Kinds of Material Karma

The material *karma* are of eight kinds : Knowledge-obscuring (*jñānāvaraṇīya*), perception-obscuring (*darśanāvaraṇīya*), feeling-producing (*vedanīya*), deluding (*mohanīya*), life-span-determining (*āyu*), physique-determining (*nāma*), status-determining (*gotra*) and obstructing (*antarāya*). Knowledge-obscurring, perception-obscuring, deluding and obstructing *karmas* obscure or obstruct the knowledge, perception, intrinsic conduct or bliss (*sukha*) and power (*vīrya*) of the soul and thus they are known as destructive (*ghāti*) *karmas*. The remaining four *karmas* are known as non-destructive (*aghāti*) because, for most part, they influence the body of a living being. The feeling-producing *karma*, however, may affect the soul like a destructive *karma*. It operates as a result of knowledge-obscuring and perception-obscuring *karmas* and with the help of deluding *karma*. In other words, if one does not have a rational outlook and knowledge (due to perception-obscuring and knowledge-obscuring *karmas*), and has indulgence (*rati*) and/or ennui (*arati*) (due to deluding *karma*), then feelings of physical pleasure and pain may lead to undesirable thoughts and emotions. Thereby the feeling-producing *karma* may influence the soul. Thus the feeling-producing *karma* has been placed between perception-obscuring and deluding *karmas*. This has been described by Acarya Nemicandra Siddhantacakravarti in *Gommatasāra Karmakāṇḍa*.(2)

ghādimva veyaṇīyam mohassa bāleṇa ghādade jīvam
idi ghādiṇam majjhe mohassādimhi paḍhidam tu 19

The feeling-producing *karma* by the force of deluding *karma* destroys the soul like a destructive *karma*. Therefore it is placed in the middle of destructive and before deluding *karma*.

ṇaṭṭhā ya rāyadosā indiyaṇāṇam ca kevalimhi jado
teṇa du sādāsādajasuhadukkham ṇatthi indiyajam 273

Because in the Omniscient (*kevalī*), attachment and aversion, and sensual knowledge are destroyed, therefore in him there is no happiness or misery due to the feeling-producing *karma* which causes the feelings of sensual pleasure and pain.

Each kind of *karma* is further divided into a number of sub-classes. For example, the feeling-producing *karma* is divided into pleasant-feeling-producing (*sātāvedanīya*) and unpleasant-feeling-producing (*asātāvedanīya*). Similarly, the deluding *karma* has been divided into two

sub-classes: Perception-deluding (*darśanamohanīya*) and conduct-deluding (*cāritramohanīya*). It should be noted that the deluding *karma* obscures the development of rationalism (*samyaktva*). As the name implies, it prevents a person from having a rational perspective of reality (*tattvārtha*). To quote from *Gommaṭasāra Jīvakāṇḍa* of Acarya Nemicandra Siddhantacakravarti.(3)

micchodayena micchattamasaddahaṇam tu tacca atthāṇam
eyantam vivarīyam viṇayam samsaidamaṇṇāṇam 15

Delusion or irrationalism (*mithyātva*) is caused by the operation of perception-deluding *karma*. It consists of not having a rational perspective (*śraddhāna*) towards reality, i.e., the nature of things (*tattvārtha*). Irrationalism is of five kinds : One-sided belief (*ekānta*), perverse belief (*viparīta*), veneration (*vinaya*), doubt (*samśaya*) and indiscriminate belief (*ajñāna*).

Influx (āsrava) and Bonding (bandha)

The influx (*āsrava*) of *karma* particles is caused by the activities (*yoga*) of the body, the organs of speech and the mind as described by Acarya Umaswami in *Tattvārthasūtra* :(4)

kāyavāṅgmanahkarmayogah 6-1 *sa āsravah* 6-2

It should be noted that all activities, desirable (*śubha*) and undesirable (*aśubha*), give rise to the influx of *karma* particles. It is only the intrinsic characteristic activities, infinite perception, knowledge and bliss (*ananta darśana, jñāna* and *sukha*) of the soul which are known as *śuddhopayoga*, that do not cause the influx of *karma* particles. The *karma* particles which come to the soul as a result of influx then become associated with the soul. This process is known as bonding (*bandha*). The bonding of *karma* particles has four aspects : Nature (*prakṛti*), i.e., the kind (knowledge-obscuring, deluding, etc.) of *karma*; quantity (*pradeśa*), i.e., the number of *karma* particles; duration (*sthiti*), i.e., length of association; and, fruition (*anubhāga*), i.e., the intensity of consequence of *karma*. The nature and quanity of *karma* that become associated with the soul depend on the nature and intensities of the activities (*yoga*) which caused the influx. In other words, the intensity of desire or thought-activity, intentional or unintentional character of activity, dependence of the act upon living and non-living substances (*adhikaraṇa*) and one's own position and power determine the kind of *karma* and the number of *karma*

particles which are attracted towards the soul. This has been described by Acarya Umaswami in *Tattvārthasūtra* :(4)

tīvramandajñātājñātabhāvavīrya'dhikaraṇaviśeṣebhyastadviśeṣah. 6-7

The duration and fruition of *karma* are determined by the passions (*kasāya*) and the states of mind of the living being. This has been stated in *Gommaṭasāra Karmakāṇḍa* :(2)

jogā payaḍipadesā ṭhidiaṇubhāgā kasāyado honti
apariṇaḍucchiṇṇesu ya bandhaṭṭhidikāraṇam ṇatthi 257

The nature and quantity bonding of *karma* are caused by thought-activity, and duration and fruition bonding, by passions. In the eleventh stage of subsided delusion (*upaśāntamoha*), where the deluding *karma* exists in a passive state and does not operate (*i.e.*, is not subject to modification), and in the twelfth delusionless (*kṣīṇamoha*) stage and in the thirteenth stage of active omniscient conqueror (*sayoga kevali*), where the passions have been destroyed, there is no cause for bonding. In the fourteenth stage of inactive omniscient, there is no bondage. The fourteen spiritual stages have been described below.

There are thirty-nine different kinds of activities that lead to the influx and bonding of *karma* particles. These include the activities of the five senses (of touch, taste, smell, sight and hearing), activities involving the four passions (anger—*krodha*, pride—*māna*, intrigue—*māyā* and greed—*lobha*), activities involving violence (*himsā*), untruth (*asatya*), stealing (*steya*), unchastity (*abrahmacarya*) and worldly attachment (*parigraha*), and, rational activities (*samyaktva*), irrational activities (*mithyātva*), experimentation (*prayogakriyā*), mental pain to oneself or others (*paritāpikīkriyā*), infatuated desire to see a pleasant or unpleasant object (*darśanakriyā*), etc.(5)

The activities of the worldly souls have also been classified in the following manner : There are 3 phases of each activity, determination (*samkalpa*), preparation (*samārambha*) and commencement (*ārambha*). Each one of these may involve the activity of mind, speech and body, giving 9 variations. A person can do the act himself, can get it done by others or can just give the approval for the act. Thus we get $9 \times 3 = 27$ types of activities. These 27 types multiplied by 4 different passions (anger, pride, intrigue and greed) yield 108 different shades of activities.

Thought-activity and Spiritual Stages (guṇasthānas) of Soul

A worldly soul can have the following five different kinds of thought-activities :

1. Subsidential (*aupaśamika*) arising from the subsidence (*upaśama*) of deluding *karma*.
2. Destructional (*kṣayika*) arising from the shedding of destructive *karmas*.
3. Destructional-subsidential (*kṣyayopośamika*) arising from the partial shedding, partial subsidence and partial operation of destructive *karmas*.
4. Operative (*audayika*) arising from the operation of *karmas*.
5. Intrinsic or natural (*pariṇāmika*) which are the characteristic thought-activities (*bhāva*) of a soul. These are not caused by *karma*. Development of such thought-activity by a worldly soul leads to self-modification.

There are fourteen spiritual stages (*guṇasthānas*) which are distinguished by the kinds of thought-activities of the soul. These spiritual stages and the corresponding thought-activities are shown in the following table :

No.	Spiritual Stages	Thought-activities
1.	Deluded or irrational (*mithyātva*)	Operative
2.	Indifferent, neither rational nor irrational (*sāsādana*)	Natural or intrinsic
3.	Mixed, partially rational (*miśra*)	Destructional-subsidential
4.	Vowless rational (*avirata samyaktva*)	Subsidential, Destructional, Destructional-subsidential
5.	Partial vow (*deśavirata*)	Destructional-subsidential
6.	Imperfect vow (*pramattavirata*)	Destructional-subsidential
7.	Perfect vow (*apramattavirata*)	Destructional-subsidential
8.	New thought activity (*apūrvakaraṇa*)	Subsidential
9.	Advanced thought activity (*anivṛttikaraṇa*)	Subsidential, Destructional
10.	Slight delusion (*sukṣmasamparāya*)	Subsidential, Destructional
11.	Subsided delusion (*upśāntamoha*)	Subsidential, Destructional
12.	Delusionless (*kṣiṇamoha*)	Subsidential, Destructional
13.	Active omniscient conqueror (*sayoga kevalī jina*)	Destructional
14.	Inactive omniscient (*ayoga kevalī*)	Destructional

The spiritual stages have been described in *Gommaṭasāra Jīvakāṇḍa* (3) as follows :

jehim du lakkhijjante udayādisu sambhavehim bhavehim
jīvā te guṇasaṇṇā ṇiddiṭṭhā savvadarasihim 8

The thought-activities caused by the operation, etc., of *karmas* determine the spiritual stages of the soul as has been stated by the omniscient.

miccho sāsaṇa misso aviradasammo ya desavirado ya
viradā pamatta idaro apuvva aṇiyaṭṭhi suhamo ya 9

The spiritual stages are : Delusion, downfall, mixed, vowless rationalism, partial vow, imperfect vow, perfect vow, new thought activity, advanced thought-activity, slight delusion, and

uvasānta kṣiṇamoho sajogakevalijiṇo ajogī ya
caudasa jīvasamāsā kameṇa siddhā ya ṇādavvā 10

Subsided delusion, delusionless, active omniscient conqueror and inactive omniscient. After the last spiritual stage, the soul becomes liberated (*siddha*).

The fourteen spiritual stages are steps taken by a worldly soul to gradually change its thought-activities from those caused by *karma* to its (soul's) natural characteristic ones. The *karmas* of various kinds undergo subsidence, become inoperative and are destroyed gradually. The process is basically one of attaining rational perception, rational knowledge and rational conduct which utlimately results in salvation (*nirvāṇa*). This process has been described in the above *gāthā*. (Also see *Karmakāṇḍa*, *gāthā* 257 cited above.)

Stoppage (samvara) and Shedding (nirjarā) of Karma

Absence of all desirable and undesirable thought-activities, achieved through self-modification, leads to the stoppage of influx of *karma* particles. Self-modification, meditation and penance also lead to the shedding of *karma* particles by the soul. This type of shedding which is shedding without fruition is known as *avipāka nirjarā*. The *karma* particle are shed by the soul after their fruition as well. Such shedding is known as *savipāka nirjara*. It is evident from the discussion of the thought-activities (*yoga*) that the thought-activities like mental pain to

oneself or others (*paritāpikīkriyā*) should be absent during penance, fasting and other religious observances. Otherwise, they will only lead to the influx of undesirable *karma*. Further, the religious observances should not involve any passion, pride, show, desire to accumulate good *karma* (*puṇya*), fear of undesirable *karma*, etc.

Pseudo-karma (nokarma)

In addition to the *karma* particles, there are pseudo-*karma* (*no-karma*). These basically constitute the environment and circumstances of a worldly soul such as home, school, temple, books, teacher, economic and political atmosphere, climatic conditions, medicine, etc. Sometimes, these prove to be the determining factors (*nimitta*) in certain events in the life of a worldly soul. Some pseudo-*karmas* are part of the environment of a living being that happen to be present just by chance, in many instances. Some are accumulated by the worldly soul as stated in *Gommaṭasāra Karmakāṇḍa* : (2)

dehodayeṇa sahio jīvo āharadi kamma ṇokamamam
paḍisamayam savvangam tattāyasapiṇḍaovva jalam 3

Due to the association of the body, *karma* and pseudo-*karma* are attracted by the soul every moment towards the entire body like a hot ball of iron in water.

The pseudo-*karmas* have been described in detail in *Karmakāṇḍa*, *gāthās* 69-86. The pseudo-*karmas* are not *karmas* but they appear to play the role of *karmas*. In other words, sometimes the course of events taking place in the presence of pseudo-*karmas* may lead to the delusion of fruition of *karma* particles. Thus many events in the life of a living being could be caused just by pseudo-*karma* and a person may incorrectly assume that such events are the consequences of *karma*. Let us consider a few examples. In a train accident or a natural disaster, all the people involved may feel that it was caused by their *karma* which may not be true. A student failing an examination may blame his undesirable *karma* while it could be just the mood of the examiner which may be responsible for his failure. A businessman making a profit or suffering a loss may feel that the profit or loss is the result of his *karma* but it could be due to the change in the economic or political factors beyond his control or just by chance. In the case of a person arriving late for an interview and not getting the job, it could be the traffic or rain storm and not his *karma*. A person may accumulate large amount of wealth as a result of a few intelligent decisions or some favourable chances or

some shrude moves or even some dishonest deals. *Karma* does not have to be necessarily responsible for this. However, it is not possible for us to determine which event is the consequence of *karma* and which event is caused by pseudo-*karma*. Moreover, we should not forget that a good job, wealth, means of luxury, etc., are just pseudo-*karmas* and that happiness is the state of mind which an individual can attain regardless of *karma* and *nokarma*. This is stated in *gāthās* 60-62 of *Pañcastikāyasāra* quoted above. Happiness and grief are the results of the thought-activities of the individual self, *karma* and pseudo-*karma* are only the external causes. It should be noted that the pleasant-feeling-producing (*sātāvedanīya*) *karma* can be changed into unpleasant-feeling-producing (*asātāvedanīya*) *karma* and vice versa as described below.

Transformations of Karma

From the above discussion, it is evident that there is an intimate relationship between the thought-activities (feelings, passions and emotions) of an individual and the influx, bonding, fruition, stoppage and shedding of *karma* particles. The feelings and emotions also lead to the following transformations of *karma* particles which are in the possession of the worldly soul, as described in *Gommaṭasāra Karmakāṇḍa* : (2)

> *vandhukkaṭṭaṇakaraṇaṁ sankamamokaṭṭudīraṇā sattaṁ*
> *udayuvasāmaṇidhattī ṇikācaṇā hodi paḍipayaḍī* 437

There are ten modes (*karaṇas*) affecting each subclass of *karma* which are as follows :

1. Bonding (*bandha*).
2. Increase (*utkarṣaṇa*) in the duration and fruition.
3. Decrease (*apakarṣaṇa*) in the duration and fruition.
4. Transference (*sankramaṇa*) of one sub-class of *karma* into another sub-class of the same kind of *karma*. For examples, the pleasant-feeling-producing (*sātāvedanīya*) *karma* can be transformed into unpleasant-feeling-producing (*asātāvedanīya*) *karma* and *asātāvedanīya*, into *sātāvedanīya karma*.
5. Premature operation (*udīraṇa*).
6. Existence (*sattā*).
7. Operation (*udaya*).
8. Subsidence (*upaśama*). *Karma* particles are prevented from operation for a limited time. During this time, they may suffer transference and or, increase or decrease of duration and fruition.

9. *Nidhatti.* This means that *karma* particles are prevented from operation for a limited time. During this time, they are neither brought into operation prematurely, nor transformed into those of another sub-class, but they may suffer increase or decrease of duration and fruition.
10. *Nikacana.* In this case, the *karma* particles are prevented from operation for a limited time during which premature operation, transference and increase or decrease in duration and fruition can not occur.

Transference is of five kinds :

uvvelaṇavijjhādo adhāpav ·tto guṇo ya savvo ya
samkamadi jehim kammam pariṇāmavaseṇa jīvāṇam 409

There are the following five kinds of divisions by which *karmas*, by the thought-activities of souls, are transformed into other *karmas*.

1. *Udvelana sankramaṇa*, the transference in which one type of material *karma* is transformed into another without the following three kinds of thought-activities : *adhah* (downward), *apūrva* (new) and *anivṛtti* (advanced).

2. *Vidhyata sankramaṇa*, the transference occuring when the soul has slight purity of thoughts. In this case, the duration and fruition are reduced due to such thought-activities.

3. *Adhahpravṛtti sankramaṇa*, the transference occuring in the material *karma* from one type to another during their bonding.

4. *Guṇa sankramaṇa*, the transference in which the number of material *karma* particles changes by several orders of magnitude.

5. *Sarva sankramaṇa*, the transference of all material *karma* particles in the possession of the soul.

The above concepts indicate that the soul can modify the material *karma* particles in its possession by appropriate thought-activity. Thus it is the soul and not *karma* which is more powerful. Details of transference have been described in the Jaina scriptures.

Modern Science and the Theory of Karma

Modern Science

"Science is the product of man's attempt to understand himself and the world in which he lives; it embodies knowledge about the natural world and ourselves, and it is organized in a systematic fashion derived from experimentation and observation." (6) Science is the study of natural phenomena—matter, energy, life processes, etc. Thus science helps in unraveling the nature of things (*vastusvarūpa*). At present, there is no direct scientific experimental evidence which can support all aspects of the theory of *karma*—it is not possible to perform any experiments on a soul. Nevertheless, many features of the theory of *karma* have their parallel in modern science and the principles on which the Jaina *karma* theory is based are the same as the basic tenets of modern science.

According to modern science, all natural phenomena occur because of the intrinsic attributes of the substances involved. The *gāthās* 60-62 of *Pañcāstikāyasāra* quoted above, conform to this principle of modern science. The theory of *karma* may be considered as the interactions between soul and material particles which occur due to the thought-activities of a living being and due to the attributes of soul and the particles of matter. Let us consider a few natural phenomena. Water from rivers, lakes and oceans is evaporated by the rays of the sun. The water vapor rises, clouds are formed and it rains. Thus rain results from the interactions between water, solar energy, atmospheric particles, wind, etc. Such interactions occur due to the intrinsic properties of matter and energy. Charcoal burns because atoms of carbon have the capability of combining with atoms of oxygen, each atom of carbon combining with two atoms of oxygen to form carbon dioxide. When 6×10^{23} atoms of carbon combine with $2 \times 6 \times 10^{23}$ atoms of oxygen to form carbon dioxide, 94 kilocalories of heat are evolved and no one can change the amount of energy released in this process. However, if a limited supply of air is passed through hot coke (carbon and ash), carbon monoxide is formed in which one atom of carbon combines with one atom of oxygen. This is an example of a chemical reaction being affected by the environment. The phenomenon of catalysis, i.e., the speeding up of the rate of a chemical reaction by the presence of some substances which themselves remain unchanged in the process, is another example of a chemical reaction being influenced by the environment. This may be compared with the concept of the pseudo-*karmas* and *karmas* creating the environment for the thought-activities of a living

being and the innate transformations of the soul. However, it is not possible to draw an exact parallel because the innate transformations of the soul, and, the mechanism of interaction between soul and material particles are beyond experimentation.

Living and Non-living Beings in Modern Science

"Living things have certain characteristics, none of which by itself is sufficient to define them as being alive, but which, when taken together, enable us to distinguish them from non-living. The capacities for growth, maintenance and repair, reproduction, movement, responsiveness, change—these are the properties of the living."(6) Science has not been able to determine what imparts all these characteristics to the living beings. It is the soul which does that according to Jainism. Further, modern science says "Life is characterized by the capacity to perform a series of highly organized interacting processes that occur within a a definite framework."(6) There are certain large molecules known as nucleic acid which are informational molecules. These are DNA (deoxyribonucleic acid) and RNA (ribonucleic acid). DNA can reproduce itself and it contains within it the information for directing the synthesis of proteins. DNA is like a blueprint which resides in the nucleus of the cell. RNA is the transcriber and translator of the genetic code which is the symbolic message that directs the cell to produce specific substances. "A gene is a linear stretch of the DNA molecule that contains the information for producing a protein chain."(6) Genetic changes (mutations) are produced in a cell or an organism when one nucleotide (building block of the nucleic acid) is exchanged for another. These concepts are parallel to the Jaina concept of the physique-determining *karma*. However, there are some important differences between the two concepts. First according to the Jaina concepts, the *karma* particles can not be detected by any means, and, second, heredity plays an important role in the case of genes but it does not play the same role in the case of *karma* particles. Nevertheless, the parallelism between the concept of informational molecules and the theory of *karma* is significant.

Influence of Feelings and Emotions on Life Processes

Our feelings and emotions have a profound influence on our body. Dr. Martin Stein of Mount Sinai Medical Center of New York studied six men whose wives died of breast cancer. He found that each one of them "showed marked changes in their lymph cells, which help guard against disease...Thus the grief of their wives' illness and death had put them at a greater risk to developing some kind of illness themselves."(7)

Scientists have also discovered "that our brains, which are responsible for making us feel the complicated sensation we call pain, contain endorphins, natural analgesics that are, milligram for milligram, several times more potent than morphine."(7) These natural pain-reliving-substances, endorphins, are particularly concentrated in the limbic system which is located in that part of the brain which is closely linked with strong emotions.

The chemical system of our body is controlled by the brain. The endorcrine system consisting of about a dozen glands in our body, reacts to mental stress. When a man is under tension, adrenalin from his adrenal glands gets into his blood stream and his heart starts to beat faster. Some hormones from his pituitary gland at the base of the brain, raise his blood pressure. These effects can give him a heart attack or stroke. Even the immune system of our body which protects us from infection, is influenced by our feelings and emotions. People in stressful situations are more likely to develop such problems as sore throat, influenza, etc. Just as negative emotions like grief and anger produce adverse effects on our body the positive emotions help in preventing and curing illness.(7) Thus the secret of good health, longevity and happiness lies in a life of non-violence, being at peace with oneself and with our environment. The above discussion indicates the effect of our thoughts and emotions on the life processes which involve material particles (the various chemicals in the body). The Jaina theory of *karma* also involves the effect of our thought-activity and passions on material *karma* particles. It should, however, be remarked that *karma* particles are different from the chemical substances in the body.

Effect of Environment on Our Feelings and Emotions

The fruition of *karma* is the process involving the effect of material particles on the living beings. Again, it is beyond the realm of modern science to study such effects. However, there are many instances in which our environment, which is our pseudo-*karma* according to the Jaina principles, influences our thought-activities. Psychologists believe that our frame of reference and self-image are established early in life. These serve as guides in our later life. (This is like our past *karma* affecting our present.) Researchers have found that windowless classrooms and artificial lights are not conducive to learning. Sunlight has been found to affect our mood and consequently the biological processes in our body.(8) The sight of a beautiful piece of art, the meeting with our relatives and friends, watching a horror movie, etc., give rise to different kinds of thoughts and feelings. However, a person can develop

his inner strength and may not let the environment influence his thought-activity and feelings. Similarly, a person can develop the capability to control the effect of fruition of *karma* on his thought-activity and feelings.

Some Parallels of Transformations of Karma

The Jaina *karma* theory implies that the material *karma* particles associated with the soul of an individual contain information on the past thought-activity and passions of the individual. There could be some code for recording the nature (*prakṛti*), duration (*sthiti*), fruition (*anubhāga*), etc., and the transference could involve altering this coded information by means of the appropriate thought-activity. This can be compared to the informational role of the nucleic acids, the functioning of our memory and the memory of a computer. Of these, so far, only the working of the memory of the computer is best understood. Modern computers store bits of information in extremely tiny cells. Each cell can store one bit of information and is a two-state device, one state representing a zero (0) and the other state, a one (1). The different characters are represented by different sequences of 0's and 1's. For example, the sequence 11000001 represents the letter A and the sequence 11100011, the letter T. The contents of the memory of a computer can be easily changed by altering the sequences of 0's and 1's stored in the various cells. Very little is known about the functioning of the memory of a living being. "The task of RNA is to act as a copy of the senes and pass on this impressed blueprint for the correct construction of bodily proteins. In theory, therefore, the ability of RNA to handle information seemed to make it a suitable agent for the handling of memory......Memory has three ingredients—registration, retention and recall......If RNA is the chemical that, by having its molecular pattern altered during registration, is the card index basis of memory, this fact does not explain how the card index is either maintained (retention) or used (recall)."(9) However, learning a new solution to a mathematical problem or the new address and telephone number of a friend, forgetting something, etc., constitute changes in the information stored in our memory. The new and developing field of genetic engineering involves manipulation of the genes, i.e., modifying—the information stored in them. These are some examples of modifications of stored information. The mechanism of the various aspects: nature (*prakṛti*), duration (*sthiti*), fruition (*anubhāga*), etc.) of bonding and of the various types of transference of *karma* particles is not understood. However, the phenomena of bonding and transference of *karma*, which involve storage and modification of information, seem to be similar to the working of the memory

of computers, the modifications of the information retained by us and the techniques of genetic engineering.

Conclusions

It is evident from the above discussion that the Jaina theory of *karma* conforms to the fundamental concepts of modern science. A detailed scientific study of *karma* theory and further researches in the field of biology are expected to reveal many more important similarities between the theory of *karma* and scientific knowledge.

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Fig. 1 Rsabhanatha, Bhairavasinghapur

Fig. 2 Caturvimsatipatta of Rsabhanatha, Bhairavasinghapur

Two Jaina Sculptures from Bhairavasinghapur

UMAKANTA SUBUDDHI

Two Jaina sculptures, a seated image of Lord Rsabhanatha and a *Caturvimśatipatta* relief of Rsabhanatha, are noticed by the present author in Bhairavasinghapur village, situated about nine kilometres to the north-east of the tahsil town of Borigumma in the Jeypore sub-division of Koraput district. Of them, the Rsabhanatha image (Fig. I) is enshrined inside a thatched mud house of the village and is worshipped as Siva by the local people, while the *Caturvimśatipatta* relief of the Lord (Fig. 2) is found embedded on the outer wall of a similar house, enshrining a tutelary goddess called Banadurga, somewhat away from the village on the slope of a mountain. Both the sculptures bear some minor scratches here and there on the body, apparently for having received a rough handling on their way to the present sites. While the Rsabhanatha image is in a fairly good state of preservation, the *Caturvimśatipatta* relief is a little weathered for having been exposed to nature.

The Rsabhanatha image measures 95×55 cm. and resembles similar images from the nearby villages of Kamta and Charamula now exhibited in the District Museum, Jeypore.(1) In the image, Lord Rsabhanatha is found seated on a lion throne in *paryaṅkāsana* with hands laid in *yoga-mudrā* or meditative posture. The *śrivatsa* symbol, usually found on the chest of the Tirthankara images, is invisibly seen on the chest of the Lord. The face, looking sublime with spiritual glow, has elongated ears and a *jaṭāmukuṭa,* arranged beautifully in three parts and falling on his shoulders. The stele of the image has an oval-shaped lotus halo *(prabhā-maṇḍala)* adorned with floral designs and bead laces. A trilinear umbrella is seen above the head of the Lord and is surmounted by a heavenly drum, being played by a drummer whose head and hands are visible. The leaves of the Nyagrodha tree of perfect knowledge are seen covering the crest of the umbrella. Flying Vidyadharas and Kinnaris holding garlands are found on either side of the umbrella and above them are seen, at the top, two elephants holding flower bouquet in their trunks and two *makaras* holding pearls between their jaws. Bharata and Bahuvali, the *caurī*-bearers of the Lord, are found standing on either side with their right hands holding *caurīs* and left hands resting on their hips. The Lords's

lāñchana, the bull, is seen sitting at the bottom of his seat, held by two leogriffs facing opposite sides. Between the leogriffs and just below the seat of the Lord is seen a six-armed Cakresvari riding a Garuda and seated in *lalitāsana*. The Sasanadevi is holding a citrus, noose, *vajra*, disc and an arrow in five hands while the sixth hand is in *varada-mudrā*. On the right side bottom of the image is found a standing figure of Yaksa Gomukha. He is, as usual, bull-faced, pot-bellied and four armed. He holds a noose, hatchet, rosary in his three hands while the fourth hand is in *varada*-pose. On the left side bottom are seen some devotees paying obeisance to the Lord.

The *Caturvimśatipaṭṭa* relief, measuring 65 × 35 cm., has all the twenty-four Tirthankaras seated in hierarchical order with Lord Rsabhanatha as the *mūlanāyaka* or the main deity. The relief seems to be an improved version of a similar relief of twenty-four Tirthankaras now exhibited in the District Museum, Jeypore.(2) In the relief, the Lord is found sitting on a throne seat in *paryaṅkāsana* with hands laid in *yoga*-posture. The *śrivatsa* symbol is clearly seen on his chest. His face, badly mauled by chiselling marks, has elongated ears and a coiffure divided into three parts with locks falling on his shoulders. The stele has an oval-shaped lotus halo with bead strings forming as contours. A trilinear umbrella is seen over the head of the Lord and is surmounted by a heavenly drum, a drummer and the leaves of a Nyagrodha tree. Two Tirthankaras, seated in meditative postures are seen on either side of the celestial umbrella and behind them are found two elephants holding flower bouquet. Eighteen Tirthankaras, all in meditative postures, are found seated in a vertical order on either side of the Lord in twos (three rows) and single (three rows). Three other Tirthankaras, also in *yoga-mudrā*, are seen below the seat of the Lord on the pedestal. The Lord's *lāñchana*, the bull, is found in a standing position just below his seat and the *lāñchanas* of several other Tirthankaras are invisibly seen. In the middle of the pedestal is seen a four-armed Cakresvari, seated in *lalitāsana* and riding a Garuda. She holds a citrus, noose, and thunderbolt in her three hands while the fourth hand is laid in *varada-mudrā*.

The iconographic features of the two images, as documented above, agree with post-Gupta characteristics of Jaina iconography(3) and, hence, can be assigned to the post-Gupta period. Unfortunately neither of the two images nor their counterparts found in other areas of Jeypore sub-division bear any inscription that would ascribe them a definite date. Only on stylistic grounds we can assign them to the post-Gupta period and place them between the seventh and ninth century A.D.

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On the Allegory of Parasmani

[Developed on a theme discussed by Dr. M. K. Jain in an article on *Paraśmaṇi* and Parasnath]

The early Indian texts and traditions at times contian references of a legendary stone named *sparśamaṇi* or *paraśmaṇi* (Bengali, also *paraś-pāthar*). This stone is said to have the miraculous power in converting any object, be it stone or metal, into pure gold by its mere touch. Thus, in the *Srīkṛṣṇajanmakhaṇḍa* of the *Brahmavaivarta Purāṇa* the gold-transforming stone is mentioned along with pearls, diamonds and gems of various hues viz., dark, white, green and blood-red.

muktāmāṇikaparaśamaṇiratnākaranvitam
kṛṣṇaśubhraharidraktamaṇirājavirājitam

In Indian legends the efficacy of the *paraśmaṇi* have often a deep spiritual meaning that is more profound than the parable of the Midas Touch. Inspired by the comparable myth of the Philosopher's stone that turned any baser metal into gold the alchemists of mediaeval Europe repeatedly made serious efforts to solve its mystery wherein they failed leaving nevertheless a trail of important discoveries in other fields. In India the stone as a gem (*maṇi*) had been sought by believers of its power for centuries in the past as it may still lure those who prefer to have faith in it as a source of inexaustible wealth and a perfect symbol of purity which can convert any ordinary object into gold, a metal not easily affected by time and atmosphere. According to a legend, once there was a statue of Lord Buddha carved in *paraśmaṇi* in the Tholing Monastery of Tibet. If the story has any basis it is impossible to locate the image with the present state of our knowledge. Another account also in the form of a legend tells how Sanatana, a devoted follower of Sri Caitanya, the apostle of Vaisnavism in mediaeval times indifferently observed a *paraśmaṇi* and made it over without any hesitation to a Brahmin who unbossomed his hard-luck tale of poverty to the saint when he was contemplating on the banks of the Yamuna at Vrndavana, the region associated with the memory of Krsna's boyhood. Poet Rabindranath who composed a beautiful verse under the name of *Sparśamaṇi* on this theme collected from the *Bhaktamāl* further related that the poor

recipient of the gold-transforming stone first became amazed and then by a sudden realisation that dawned in him about the transcendental truth dropped it down in the river and with tears in his eyes begged to the benefactor only a farction of the 'treasure' that enabled him to neglect even the *paraśmaṇi*, obviously the giver of all wealth.

je dhane haiyā dhanī maṇire māna nā maṇi
tāhāri khāṇik
māgi āmi nata śire eta bali nadī nīre
phelila māṇik

'With the very treasure being rich
Any gem thou dost not beseech
Only its bit give me better
I beg with lowering head'
This he hardly said
and threw the gem in river water.

In another poem entitled *Paraśpāthar* contained in the *Sonār Tarī* (literally the Golden Boat) Rabindranath again presents a story as an allegory on the stone. He tells about an ascetic who wandered in bleak landscapes and along the shores of the ocean in quest of the *paraś-pāthar*. Everytime he picked up a pebble or a piece of rock he hopefully touched it to an iron chain that he kept bound on his waist to obtain the expected result. After attempting for half of his life he unknowingly got his chain transformed into gold what had been pointed out by a village boy. With deep remorse and disappointment for not being attentive at the moment of discovery the wild recluse now exhausted and laden with age became prepared to retrace his steps and dedicate the remaining years of his life in search of the gem that remained somewhere on the borders of illusion and reality. The sceptic may feel that the *paraśmaṇi* so myth-bound for its quality does not actually exist though its significance as a symbol will remain beyond controversy. As if in conformity with its name Philosopher's stone it subtly refers to the charisma and magnetic glory of saints who were capable to convert the dross in man into pure gold, scientillating and without blemish. In this perspective one may wonder whether the word *paraś* (lit, touch) had been originally derived from the name of Parsva or Prarasnath, the 23rd Tirthankara who being a historical figure in all liklihood preceded Vardhamana Mahavira. As it is known, the worship of Lord Parsva-

natha that had been widespread within a vast area in the Indian subcontinent in past epochs dates back to centuries before the opening of the Christian era. In his early life a heroic prince of Varanasi, as it is known Parsva lived in 8th century B.C. The miracles associated with the images of the Tirthankara which claim the transformation of a 'heart of stone' to that of a 'heart of gold' will add a further weight to our argument with regard to the history of the legend of *paraśmaṇi.* The inconography of the Jina as distinguished by the presence of a hooded serpent, who may be classed with those Nagas of Indian folk-lore, at times the guardians of the spectreal gem or *maṇi,* may also appear significant in this connection. If even the myth of the *paraśmaṇi* has an earlier origin there is a possibility that in certain period of history it merged into the idylls of Parasnath. In the West the na me Philosopher's stone has no doubt a matching enigma that can be explained by a migration of an idea from the East or a synonymous appreciation of an age-old legend.

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